

10/17/97

Cal. apparatus  
41.1  
448

Cal. Metek disk  
47.3

IM14 monitor smoked  
after 10th sample

Washed

4.5cc  
2 clearing puffs  
30 sec puff interval

P.I.A.L. SM350/SM400		Test 52: Puff = 43.0ml in 1.97sec				10:10 17/10/97	
Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative LIT	Cumulative UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	11.4	2.0	0.0	11.4	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375944

10:10 17/10/97 Test 52: 45.0ml in 1.97sec P = 1027.0mbar T = 22.0degC  
 CQA Check: Expected = 0.00% Zero = 0.00% Before = N/A % R.H: 60%  
 Channel Sample Number LIT UNLIT MEAN Obsr'd Corr'd CO/cig  
 Number Description Smoked Puffs Puffs Puffs CO % CO % mg

1	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
2	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
3	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
4	.....	1	11.4	2.0	11.4	0.00	0.00	0.00
5	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
6	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
7	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
8	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
9	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
10	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
11	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
12	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
13	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
14	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
15	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
16	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
17	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
18	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
19	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
20	.....	0	0.0	2.0	0.0	0.00	0.00	0.00

PM3000375945

ISO 10/17/97

Cal apparatus

40.9

44.7

Fully Taped

Washed

1 R5F

2 Clearing Puffs  
30 sec Puff Interval

F.I.A.L. SM350/SM400 Test 51: Puff = 45.0ml in 1.98sec 09:58 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative Puffs LIT	Cumulative Puffs UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	7.6	2.0	0.0	7.6	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375946

09:58 17/10/97 Test 51: 45.0ml in 1.98sec P = 1027.0mbar T = 22.0degC  
COA Check: Expected = 0.00% Zero = 0.00% Before = N/A % R.H: 60%

Channel	Sample	Number	LIT	UNLIT	MEAN	Obsrvd	Corr'd	CO/cig
Number	Description	Smoked	Puffs	Puffs	Puffs	CO %	CO %	mg
1	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
2	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
3	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
4	.....	1	7.6	2.0	7.6	0.00	0.00	0.00
5	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
6	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
7	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
8	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
9	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
10	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
11	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
12	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
13	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
14	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
15	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
16	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
17	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
18	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
19	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
20	.....	0	0.0	2.0	0.0	0.00	0.00	0.00

PM3000375947

#4/3

ISO 10/17/97

cal. 41.1  
apparatus 45.0

1 R5F

Fuffy Taped  
Washed

45cc

2 clearing Puffs

30 sec Puff interval

F.I.A.L. SM350/SM400 Test 50: Puff = 45.0ml in 1.98sec 09:46 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative LIT	Cumulative UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	8.0	2.0	0.0	8.0	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375948

09:46 17/10/97 Test 50: 45.0ml in 1.98sec F = 1027.0mbar T = 22.0degC  
 CUA Check: Expected = 0.00% Zero = 0.00% Before = N/A % R.H: 60%

Channel	Sample	Number	LIT	UNLIT	MEAN	Obsr'd	Corr'd	CO/cig
Number	Description	Smoked	Puffs	Puffs	Puffs	CO %	CO %	mg
1	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
2	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
3	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
4	*****	1	8.0	2.0	8.0	0.00	0.00	0.00
5	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
6	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
7	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
8	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
9	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
10	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
11	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
12	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
13	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
14	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
15	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
16	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
17	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
18	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
19	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
20	*****	0	0.0	2.0	0.0	0.00	0.00	0.00



Iso 10/17/97

Calappatus  
41.2  
44.8

~~Fully Sealed~~  
Washed

1R5F

45sec

2 clearing Puff interval  
30 sec Puff interval

F.I.A.L.	SM350/SM400	Test 49:	Puff = 45.0ml	in 1.97sec	09:34	17Z10/97
Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Cumulative LIT	Puffs UNLIT
1	.....	0	0.0	2.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	2.0
4	.....	1	7.7	2.0	7.7	2.0
5	.....	0	0.0	2.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	2.0

09:34	17/10/97	Test 49:	45.0ml	in 1.97sec	Before	Observed	Corr'd	T = 22.0degC
Channel Number	Sample Description	Number Smoked	LIT Puffs	UNLIT Puffs	MEAN Puffs	CO %	CO %	R.H. 60%
1	.....	0	0.0	2.0	0.0	0.00	0.00	CO/cig
2	.....	0	0.0	2.0	0.0	0.00	0.00	mg
3	.....	0	0.0	2.0	0.0	0.00	0.00	
4	.....	1	7.7	2.0	7.7	0.00	0.00	
5	.....	0	0.0	2.0	0.0	0.00	0.00	
6	.....	0	0.0	2.0	0.0	0.00	0.00	
7	.....	0	0.0	2.0	0.0	0.00	0.00	
8	.....	0	0.0	2.0	0.0	0.00	0.00	
9	.....	0	0.0	2.0	0.0	0.00	0.00	
10	.....	0	0.0	2.0	0.0	0.00	0.00	
11	.....	0	0.0	2.0	0.0	0.00	0.00	
12	.....	0	0.0	2.0	0.0	0.00	0.00	
13	.....	0	0.0	2.0	0.0	0.00	0.00	
14	.....	0	0.0	2.0	0.0	0.00	0.00	
15	.....	0	0.0	2.0	0.0	0.00	0.00	
16	.....	0	0.0	2.0	0.0	0.00	0.00	
17	.....	0	0.0	2.0	0.0	0.00	0.00	
18	.....	0	0.0	2.0	0.0	0.00	0.00	
19	.....	0	0.0	2.0	0.0	0.00	0.00	
20	.....	0	0.0	2.0	0.0	0.00	0.00	

PM3000375950

ISO

10/17/97

cal. Apparatus

41.3

451

#2  
IR 5F

Fully Taped

Washed

45cc

2 clearing puffs

30 sec puff interval

F.I.A.L. SM350/SM400 Test 48: Puff = 45.0ml in 1.98sec 09:22 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative LIT	Cumulative UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	7.5	2.0	0.0	7.5	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

09:22 17/10/97 Test 48: 45.0ml in 1.98sec

COA Check: Expected = 0.00% Zero = 0.00%

Channel Number	Sample Description	Number Smoked	LIT Puffs	UNLIT Puffs
1	.....	0	0.0	2.0
2	.....	0	0.0	2.0
3	.....	0	0.0	2.0
4	.....	1	7.5	2.0
5	.....	0	0.0	2.0
6	.....	0	0.0	2.0
7	.....	0	0.0	2.0
8	.....	0	0.0	2.0
9	.....	0	0.0	2.0
10	.....	0	0.0	2.0
11	.....	0	0.0	2.0
12	.....	0	0.0	2.0
13	.....	0	0.0	2.0
14	.....	0	0.0	2.0
15	.....	0	0.0	2.0
16	.....	0	0.0	2.0
17	.....	0	0.0	2.0
18	.....	0	0.0	2.0
19	.....	0	0.0	2.0
20	.....	0	0.0	2.0

P = 1027.0mbar

T = 22.0degC

Before = N/A %

R.H: 60%

MEAN	Obsr'd	Corr'd	CO/cig
Puffs	CO %	CO %	mg
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
7.5	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00
0.0	0.00	0.00	0.00

PM3000375951



#1

10/17/97 ISD

Cal. apparatus

41.1

450

1R5F

Fully Taped  
Washed

45cc

2 clearing puffs

30 sec puff interval

F.I.A.L. SM350/SM400 Test 47: Puff = 45.0ml in 1.97sec 09:09 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative LIT	Cumulative UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	7.5	2.0	0.0	7.5	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375952

09:09 17/10/97 Test 47: 45.0ml in 1.97sec P = 1027.0mbar T = 22.0degC  
COA Check: Expected = 0.00% Zero = 0.00% Before = N/A % R.H: 60%

Channel Number	Sample Description	Number Smoked	LIT Puffs	UNLIT Puffs	MEAN Puffs	Obsrvd CO %	Corr'd CO %	CO/cig mg
1	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
2	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
3	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
4	.....	1	7.5	2.0	7.5	0.00	0.00	0.00
5	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
6	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
7	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
8	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
9	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
10	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
11	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
12	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
13	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
14	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
15	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
16	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
17	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
18	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
19	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
20	.....	0	0.0	2.0	0.0	0.00	0.00	0.00

#5  
IR4F

ISO 10/17/97

Cal. Apparatus

Fully Taped

Washed

41.1

45.0

45cc  
30 sec puff interval  
2 clearing Puffs

F.I.A.L. SM350/SM400 Test 46: Puff = 45.0ml in 1.98sec 08:55 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative Puffs LIT	UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	12.0	2.0	0.0	12.0	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375954

08:55 17/10/97 Test 46: 45.0ml in 1.98sec F = 1027.0mbar T = 22.0degC  
 COA Check: Expected = 0.00% Zero = 0.00% Before = N/A % R.H: 60%  
 Channel Sample Number LIT UNLIT MEAN Obsrvd Corr'd CO/cig  
 Number Description Smoked Puffs Puffs Puffs CO % CO % mg

1	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
2	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
3	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
4	*****	1	12.0	2.0	12.0	0.00	0.00	0.00
5	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
6	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
7	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
8	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
9	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
10	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
11	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
12	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
13	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
14	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
15	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
16	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
17	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
18	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
19	*****	0	0.0	2.0	0.0	0.00	0.00	0.00
20	*****	0	0.0	2.0	0.0	0.00	0.00	0.00

#4

10/17/97 ISD

Cal. apparatus

412

449

1R4F

Fully Taped

Washed

45cc

30 sec. puff interval

2 clearing puff

F.I.A.L. SM350/SM400 Test 45: Puff = 45.0ml in 1.98sec 08:41 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative LIT	Puffs UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	11.7	2.0	0.0	11.7	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375956

08:41 17/10/97 Test 45: 45.0ml in 1.98sec  
COA Check: Expected = 0.00% Zero = 0.00%

P = 1027.0mbar T = 22.0degC  
Before = N/A % R.H: 60%

Channel Number	Sample Description	Number Smoked	LIT Puffs	UNLIT Puffs	MEAN Puffs	Obsr'd CO %	Corr'd CO %	CO/cig mg
1	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
2	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
3	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
4	.....	1	11.7	2.0	11.7	0.00	0.00	0.00
5	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
6	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
7	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
8	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
9	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
10	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
11	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
12	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
13	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
14	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
15	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
16	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
17	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
18	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
19	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
20	.....	0	0.0	2.0	0.0	0.00	0.00	0.00

PM3000375957

#3 ISO 10/17

Cal Apparatus

~~Fully Taped~~  
Washed

414

45.1

1 R4F

45cc

2 clearing puffs

30 sec Puff interval

F.I.A.L. SM350/SM400 Test 44: Puff = 45.0ml in 1.98sec 08:27 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative Puffs	
						LIT	UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	13.5	2.0	0.0	13.5	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375958

08:27 17/10/97 Test 44: 45.0ml in 1.98sec P = 1027.0mbar T = 22.0degC  
 CDA Check: Expected = 0.00% Zero = 0.00% Before = N/A % R.H: 60%  
 Channel Sample Number LIT UNLIT MEAN Obsv'd Corr'd CO/cig  
 Number Description Smoked Puffs Puffs Puffs CO % CO % mg

1	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
2	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
3	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
4	.....	1	13.5	2.0	13.5	0.00	0.00	0.00
5	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
6	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
7	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
8	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
9	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
10	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
11	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
12	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
13	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
14	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
15	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
16	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
17	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
18	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
19	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
20	.....	0	0.0	2.0	0.0	0.00	0.00	0.00



#2

ISO 10/17/97

Cal apparatus

~~Fully Taped~~  
Washed

41.0

44.4

1 R4F

4 Sec

2 clearing puffs

30 sec puff intervals

F.I.A.L. SM350/BM400 Test 43: Puff = 45.0ml in 1.98sec 08:13 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative Puffs LIT UNLIT
1	.....	0	0.0	2.0	0.0	0.0 2.0
2	.....	0	0.0	2.0	0.0	0.0 2.0
3	.....	0	0.0	2.0	0.0	0.0 2.0
4	.....	1	12.0	2.0	0.0	12.0 2.0
5	.....	0	0.0	2.0	0.0	0.0 2.0
6	.....	0	0.0	2.0	0.0	0.0 2.0
7	.....	0	0.0	2.0	0.0	0.0 2.0
8	.....	0	0.0	2.0	0.0	0.0 2.0
9	.....	0	0.0	2.0	0.0	0.0 2.0
10	.....	0	0.0	2.0	0.0	0.0 2.0
11	.....	0	0.0	2.0	0.0	0.0 2.0
12	.....	0	0.0	2.0	0.0	0.0 2.0
13	.....	0	0.0	2.0	0.0	0.0 2.0
14	.....	0	0.0	2.0	0.0	0.0 2.0
15	.....	0	0.0	2.0	0.0	0.0 2.0
16	.....	0	0.0	2.0	0.0	0.0 2.0
17	.....	0	0.0	2.0	0.0	0.0 2.0
18	.....	0	0.0	2.0	0.0	0.0 2.0
19	.....	0	0.0	2.0	0.0	0.0 2.0
20	.....	0	0.0	2.0	0.0	0.0 2.0

PM3000375960

08:13 17/10/97 Test 43: 45.0ml in 1.98sec F = 1027.0mbar T = 22.0degC  
 COA Check: Expected = 0.00% Zero = 0.00% Before = N/A % R.H: 60%  
 Channel Sample Number LIT UNLIT MEAN Obsr'd Corr'd CO/cig  
 Number Description Smoked Puffs Puffs Puffs CO % CO % CO %  
 1 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 2 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 3 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 4 ..... 1 12.0 2.0 12.0 0.00 0.00 0.00  
 5 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 6 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 7 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 8 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 9 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 10 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 11 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 12 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 13 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 14 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 15 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 16 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 17 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 18 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 19 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00  
 20 ..... 0 0.0 2.0 0.0 0.00 0.00 0.00

#1 10/17/97 ISO

Cal. apparatus

1R4F

Fully Taped  
Washed

46.7

44.4

45 cc

2 clearing puffs

30 sec Puff interval

F.I.A.L. SM350/SM400 Test 42: Puff # 45.0ml in 1.98sec 07:58 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative Puffs LIT	UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	13.0	2.0	0.0	13.0	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375962

07:58 17/10/97 Test 42: 45.0ml in 1.98sec F = 1027.0mbar T = 22.0degC  
COA Check: Expected = 0.00% Zero = 0.00% Before = N/A % R.H: 60%

Channel Number	Sample Description	Number Smoked	LIT Puffs	UNLIT Puffs	MEAN Puffs	Obsr'd CO %	Corr'd CO %	CO/cig mg
1	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
2	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
3	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
4	.....	1	13.0	2.0	13.0	0.00	0.00	0.00
5	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
6	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
7	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
8	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
9	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
10	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
11	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
12	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
13	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
14	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
15	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
16	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
17	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
18	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
19	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
20	.....	0	0.0	2.0	0.0	0.00	0.00	0.00

PM3000375963

IM14

ISO 10/17/97

Cal apparatus  
41.1elashed

45.0

45cc  
2 clearing puffs  
30 sec puff interval

F.I.A.L. SM350/SM400 Test 41: Puff = 45.0ml in 1.98sec 07:43 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative Puffs	
						LIT	UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	12.0	2.0	0.0	12.0	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375964

07:43 17/10/97 Test 41: 45.0ml in 1.98sec F = 1027.0mbar T = 22.0degC  
 COA Check: Expected = 0.00% Zero = 0.00% UNLIT = 0.00% Before = N/A % R.H: 60%  
 Channel Sample Description Number Smoked Puffs UNLIT Puffs MEAN Obsvd Cor'd CO/cig CO % CO %  
 1 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 2 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 3 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 4 ..... 1 12.0 2.0 0.0 0.0 0.00 0.00 0.00  
 5 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 6 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 7 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 8 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 9 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 10 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 11 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 12 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 13 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 14 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 15 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 16 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 17 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 18 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 19 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00  
 20 ..... 0 0.0 2.0 0.0 0.0 0.00 0.00 0.00

10/17/97 ISO T-71.9  
H 59.6

Cal. Metal Disk  
47.5  
47.5

Dry Puff - IM14

Cal Apparatus

41.0

44.3

45 cc

2 clearing Puffs

30 sec puff interval

F.I.A.L. SM350/SM400 Test 40: Puff = 45.0ml in 1.97sec 07:28 17/10/97

Channel Number	Sample Description	Sample Number	LIT Puffs	UNLIT Puffs	Puffs Diff.	Cumulative Puffs LIT	Cumulative Puffs UNLIT
1	.....	0	0.0	2.0	0.0	0.0	2.0
2	.....	0	0.0	2.0	0.0	0.0	2.0
3	.....	0	0.0	2.0	0.0	0.0	2.0
4	.....	1	10.0	2.0	0.0	10.0	2.0
5	.....	0	0.0	2.0	0.0	0.0	2.0
6	.....	0	0.0	2.0	0.0	0.0	2.0
7	.....	0	0.0	2.0	0.0	0.0	2.0
8	.....	0	0.0	2.0	0.0	0.0	2.0
9	.....	0	0.0	2.0	0.0	0.0	2.0
10	.....	0	0.0	2.0	0.0	0.0	2.0
11	.....	0	0.0	2.0	0.0	0.0	2.0
12	.....	0	0.0	2.0	0.0	0.0	2.0
13	.....	0	0.0	2.0	0.0	0.0	2.0
14	.....	0	0.0	2.0	0.0	0.0	2.0
15	.....	0	0.0	2.0	0.0	0.0	2.0
16	.....	0	0.0	2.0	0.0	0.0	2.0
17	.....	0	0.0	2.0	0.0	0.0	2.0
18	.....	0	0.0	2.0	0.0	0.0	2.0
19	.....	0	0.0	2.0	0.0	0.0	2.0
20	.....	0	0.0	2.0	0.0	0.0	2.0

PM3000375966

07:28 17/10/97 Test 40: 45.0ml in 1.97sec  
COA Check: Expected = 0.00% Zero = 0.00%

P = 1027.0mbar T = 22.0degC  
Before = N/A % R.H: 60%

Channel	Sample	Number	LIT	UNLIT	MEAN	Obsr'd	Corr'd	CO/cig
Number	Description	Smoked	Puffs	Puffs	Puffs	CO %	CO %	mg
1	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
2	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
3	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
4	.....	1	10.0	2.0	10.0	0.00	0.00	0.00
5	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
6	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
7	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
8	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
9	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
10	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
11	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
12	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
13	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
14	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
15	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
16	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
17	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
18	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
19	.....	0	0.0	2.0	0.0	0.00	0.00	0.00
20	.....	0	0.0	2.0	0.0	0.00	0.00	0.00

PM3000375967